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## AA-5083

**Category** Aluminum Alloy

**Class** Wrought

## Composition

**Element** **Weight %**

Al 94.7

Mn 0.7

Mg 4.4

Cr 0.15

## Mechanical Properties

Properties		Conditions	
		T (°C)	Treatment
<b>Density</b> ( $\times 1000 \text{ kg/m}^3$ )	2.66	25	
<b>Poisson's Ratio</b>	0.33	25	
<b>Elastic Modulus</b> (GPa)	70-80	25	
<b>Tensile Strength</b> (Mpa)	305		
<b>Yield Strength</b> (Mpa)	195	25	H112 <a href="#">more</a>
<b>Elongation</b> (%)			
<b>Reduction in Area</b> (%)			
<b>Shear Strength</b> (MPa)	170	25	O
<b>Fatigue Strength</b> (MPa)	160	25	H321

## Thermal Properties

Properties	Conditions	
	T (°C)	Treatment

Thermal Expansion ( $10^{-6}/^{\circ}\text{C}$ )	23.4	20-100	
Thermal Conductivity (W/m-K)	120	25	All

### Electric Properties

Properties	Conditions		
	T ( $^{\circ}\text{C}$ )	Treatment	
Electric Resistivity ( $10^{-9}\text{W-m}$ )	60	25	All

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